

What is claimed is:

1 1. A high voltage rechargeable electrochemical energy storage  
2 system structure comprising an electrical series arrangement of  
3 a plurality of individual rechargeable electrochemical cells,  
4 each cell comprising a pair of opposed polarity electrode  
5 members and a separator member providing an electrolyte  
6 interposed between said electrode members, where said structure  
7 is arranged such that:

8 an electrode member of first polarity of a first cell is  
9 adjacent an electrode member of second polarity of a second  
10 cell;

11 an electrically conductive divider member is interposed  
12 contiguously between said electrode member of said first cell  
13 and said electrode member of said second cell;

14 said plurality of cells is enveloped within a casing; and

15 said divider member is affixed to said casing and forms  
16 therewith a seal isolating ionically each cell from the other  
17 cells.

1 2. A structure according to claim 1 wherein

2 said casing comprises electrically insulating material; and

3 said structure further includes means for communicating  
4 electrically between at least one electrode member and the  
5 exterior of said casing material.

1 3. A structure according to claim 2 wherein said means for  
2 communicating comprises an opening in said casing material  
3 through which said electrode member may be accessed.

1 4. A structure according to claim 2 wherein said means for  
2 communicating comprises  
3 an electrically conductive contact member in circuit with  
4 said electrode member; and  
5 an opening in said casing material through which said  
6 contact member may be accessed.

1 5. A structure according to claim 1 wherein  
2 said casing comprises electrically conductive material; and  
3 said structure includes means for electrically insulating  
4 said divider member from said conductive casing material.

1 6. A structure according to claim 5 wherein  
2 said casing comprises a first electrically conductive casing  
3 member in circuit with an electrode member of first polarity of  
4 a first cell and a second electrically conductive casing member  
5 in circuit with an electrode member of second polarity of a  
6 second cell; and  
7 said structure comprises means for providing electrical  
8 insulation between said first and second casing members.